# CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



Mayor Timothy M. Keller

February 27, 2024

Ryan J. Curley, P.E. Souder, Miller & Associates 5454 Venice Ave NE, Suite D Albuquerque, NM 87113

#### RE: Venice Volleyball Courts Conceptual Grading & Drainage Plans Engineer's Stamp Date: 02/05/24 Hydrology File: B18D022

Dear Mr. Curley:

Based upon the information provided in your submittal received 02/06/2024, the Grading & Drainage Plans are approved for Building Permit, Grading Permit, and Work Order. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

#### PRIOR TO CERTIFICATE OF OCCUPANCY:

- Albuquerque 1. Engineer's Certification, per the DPM Part 6-14 (F): *Engineer's Certification Checklist For Non-Subdivision* is required.
- NM 87103
  Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for \$25.00 made out to "Bernalillo County" for the stormwater quality ponds per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

www.cabq.gov

PO Box 1293

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3995 or <u>rbrissette@cabq.gov</u>.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM Senior Engineer, Hydrology Planning Department



# **City of Albuquerque**

Planning Department Development & Building Services Division

### DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title:	Hydrology File #
City Address, UPC, OR Parcel:	
Applicant/Agent:	Contact:
	Phone:
Email:	
Applicant/Owner:	Contact:
Address:	Phone:
Email:	
(Please note that a DFT SITE is one that need	ds Site Plan Approval & ADMIN SITE is one that does not need it.)
TYPE OF DEVELOPMENT: PLAT	(#of lots) RESIDENCE
DFT	SITE ADMIN SITE
RE-SUBMITTAL: YES NO	
DEPARTMENT: TRANSPORTA	TION HYDROLOGY/DRAINAGE
Check all that apply under Both the Type	of Submittal and the Type of Approval Sought:
TYPE OF SUBMITTAL:	<b>TYPE OF APPROVAL SOUGHT:</b>
ENGINEER/ARCHITECT CERTIFICA	TION BUILDING PERMIT APPROVAL
PAD CERTIFICATION	CERTIFICATE OF OCCUPANCY
CONCEPTUAL G&D PLAN	CONCEPTUAL TCL DFT APPROVAL
GRADING & DRAINAGE PLAN	PRELIMINARY PLAT APPROVAL
DRAINAGE REPORT	FINAL PLAT APPROVAL
DRAINAGE MASTER PLAN	SITE PLAN FOR BLDG PERMIT DFT
CLOMR/LOMR	APPROVAL
TRAFFIC CIRCULATION LAYOUT (7	SIA/RELEASE OF FINANCIAL GUARANTEE
ADMINISTRATIVE	FOUNDATION PERMIT APPROVAL
TRAFFIC CIRCULATION LAYOUT F APPROVAL	OR DFT GRADING PERMIT APPROVAL
TRAFFIC IMPACT STUDY (TIS)	SO-19 APPROVAL
STREET LIGHT LAYOUT	PAVING PERMIT APPROVAL
OTHER (SPECIFY)	GRADING PAD CERTIFICATION
omer(billen i)	WORK ORDER APPROVAL
	CLOMR/LOMR
	OTHER (SPECIFY)

DATE SUBMITTED: \_\_\_\_

# CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) PROCEDURE FOR 40 ACRE AND SMALLER BASINS

DRAINAGE BACKGROUND & NARRATIVE: THIS SITE IS ALLOWED FREE DISCHARGE TO VENICE AVE FOR ITS SOUTHERN PORTION AND PASADENA AVE FOR ITS NORTHERN PORTION PER THE SAN MATEO BUSINESS PARK DRAINAGE REPORT (SMBPDR) BY C.L. WEISS ENGINEERING INC. 1999 (B-18-D008). THE EXISTING DRAINAGE PATTERN FOR THE UNDEVELOPED SITE DRAINS EAST TO WEST OFFSITE. THE PROPOSED SITE WILL DRAIN PRIMARILY NORTHEAST TO SOUTHWEST AND FREELY DISCHARGE INTO VENICE AVE VIA A NEW RUNDOWN AND SIDEWALK CULVERT OVERFLOW FROM THE NEW STORMWATER QUALITY POND IN THE SOUTHWEST CORNER. THE PRIMARY METHOD FOR HYDROLOGY CALCULATIONS IN THE DPM IS BASED ON THE ARID-LANDS HYDROLOGIC MODEL (AHYMO) CALCULATIONS. A SIMPLIFIED PROCEDURE FOR PROJECTS WITH BASINS SMALLER THAN 40 ACRES HAS BEEN DEVELOPED BASED ON INITIAL ABSTRACTION/UNIFORM INFILTRATION PRECIPITATION LOSSES AND RATIONAL METHOD PROCEDURES.

PRECIPITATION ZONES: SECTION 6-2(A)(1)

BERNALILLO COUNTY WITHIN CITY LIMITS HAS BEEN DIVIDED INTO 4 PRECIPITATION ZONES THAT CAN BE REVIEWED IN SECTION 6-2(A)(1). THE DPM IS BASED ON NATIONAL OCEANIC AND ATMOSPHERIC AGENCY (NOAA) ATLAS 14 PRECIPITATION DATA. FOR THE PROJECT SITE, ZONE 3 HAS BEEN SELECTED FOR LOCATIONS "BETWEEN SAN MATEO AND EUBANK, NORTH OF I-40 AND BETWEEN SAN MATEO AND THE EAST BOUNDARY OF RANGE 4 EAST." AN EXCERPT OF PRECIPITATION DATA FROM TABLE 6.2.8 FOR ZONE 3 FOR THE 100-YEAR STORM EVENT IS INCLUDED BELOW:

PRECIPITATION FOR ZONE 3: 100-YEAR STORM EVENT												
	5	10	12	15	30	60	2	3	6	24	4	10
	MIN	MIN	MIN	MIN	MIN	MIN	HR	HR	HR	HR	DAY	DAY
DEPTH (IN)	0.584	0.889		1.100	1.480	1.840	2.150	2.220	2.430	2.840	3.290	4.100
INTENSITY (IN/HR)	7.01	5.33	4.96	4.40	2.96	1.84	1.08	0.74	0.41	0.12	0.03	0.02
FROM DPM TABLE 6.2.8												

LAND TREATMENTS: SECTION6-2(A)(2)

LAND AREAS ARE DESCRIBED BY ONE OF FOUR BASIC LAND TREATMENTS OR BY A COMBINATION OF THE FOUR LAND TREATMENTS. LAND TREATMENTS CAN BE REVIEWED IN TABLE 6.2.9.

## LAND TREATMENTS IN PROJECT SITE

BASIN ID	AREA (ACRES)	LAND TREATMENT A (ACRES)	LAND TREATMENT B (ACRES)	LAND TREATMENT C (ACRES)
EXISTING SITE	1.72	1.72		
PROPOSED SITE	1.72			1.12

ABSTRACTIONS: SECTION 6-2(A)(3)

INITIAL ABSTRACTION IS THE PRECIPITATION DEPTH THAT MUST BE EXCEEDED BEFORE DIRECT RUNOFF BEGINS. INITIAL ABSTRACTION MAY BE INTERCEPTED BY VEGETATION, RETAINED IN SURFACE DEPRESSIONS, OR ABSORBED ON THE WATERSHED SURFACE.

ABSTRACTION IN PROJECT SITE BY LAND TREATMENT								
BASIN IDABSTRACTION FOR TREATMENT AABSTRACTION FOR TREATMENT BABSTRACTION FOR TREATMENT CABSTRACTION FOR ABSTRACTION FOR TREATMENT DWEIGHTED INITIA ABSTRATION (IN)								
SITE	0.65	0.50	0.35	0.10	0.15			
FROM TABLE 6.2.11 IN DPM								

EXCESS PRECIPITATION AND VOLUMETRIC RUNOFF: SECTION 6-2(A)(4)

EXCESS PRECIPITATION, E, IS THE DEPTH OF PRECIPITATION REMAINING AFTER ABSTRACTIONS ARE REMOVED. EXCESS PRECIPITATION DOES NOT DEPEND ON WATERSHED AREA. EXCESS PRECIPITATION IS DETERMINED BY SUBTRACTING THE INITIAL ABSTRACTION AND INFILTRATION FROM THE DESIGN STORM HYDROGRAPH.

	EXCESS PRECIPITATION IN PROJECT SITE BY LAND TREATMENT								
BASIN ID	EXCESS PRECIPITATION TREATMENT A	EXCESS PRECIPITATION TREATMENT B	EXCESS PRECIPITATION TREATMENT C	EXCESS PRECIPITATION TREATMENT D	WEIGHTED EXCESS PRECIPITATION (IN)				
SITE	0.67	0.86	1.09	2.58	2.30				
FROM TABLE 6.2.13 IN DPM									

**DEVELOPED VOLUMETRIC RUNOFF PER EQUATION 6.2** SITE EXISTING = 6,867 CU-FT SITE PROPOSED = 11,921 CU-FT

PEAK DISCHARGE RATE FOR SMALL WATERSHEDS: SECTION6-2(A)(5) PEAK DISCHARGE RATES ARE GIVEN IN TABLE 6.2.14 FOR SMALL WATERSHEDS, LESS THAN OR EQUAL TO 40 ACRES, WHERE THE TIME OF CONCENTRATION IS ASSUMED TO BE 12 MINUTES.

**DEVELOPED PEAK DISCHARGE RATE PER EQUATION 6.6 ONSITE EXISTING = 3.22 CFS OFFSITE EXISTING = 1.05 CFS** 

**ONSITE PROPOSED = 6.02 CFS OFFSITE PROPOSED = 2.25 CFS** TOTAL TO INLET = 8.27 CFS

## STORM WATER QUALITY VOLUME

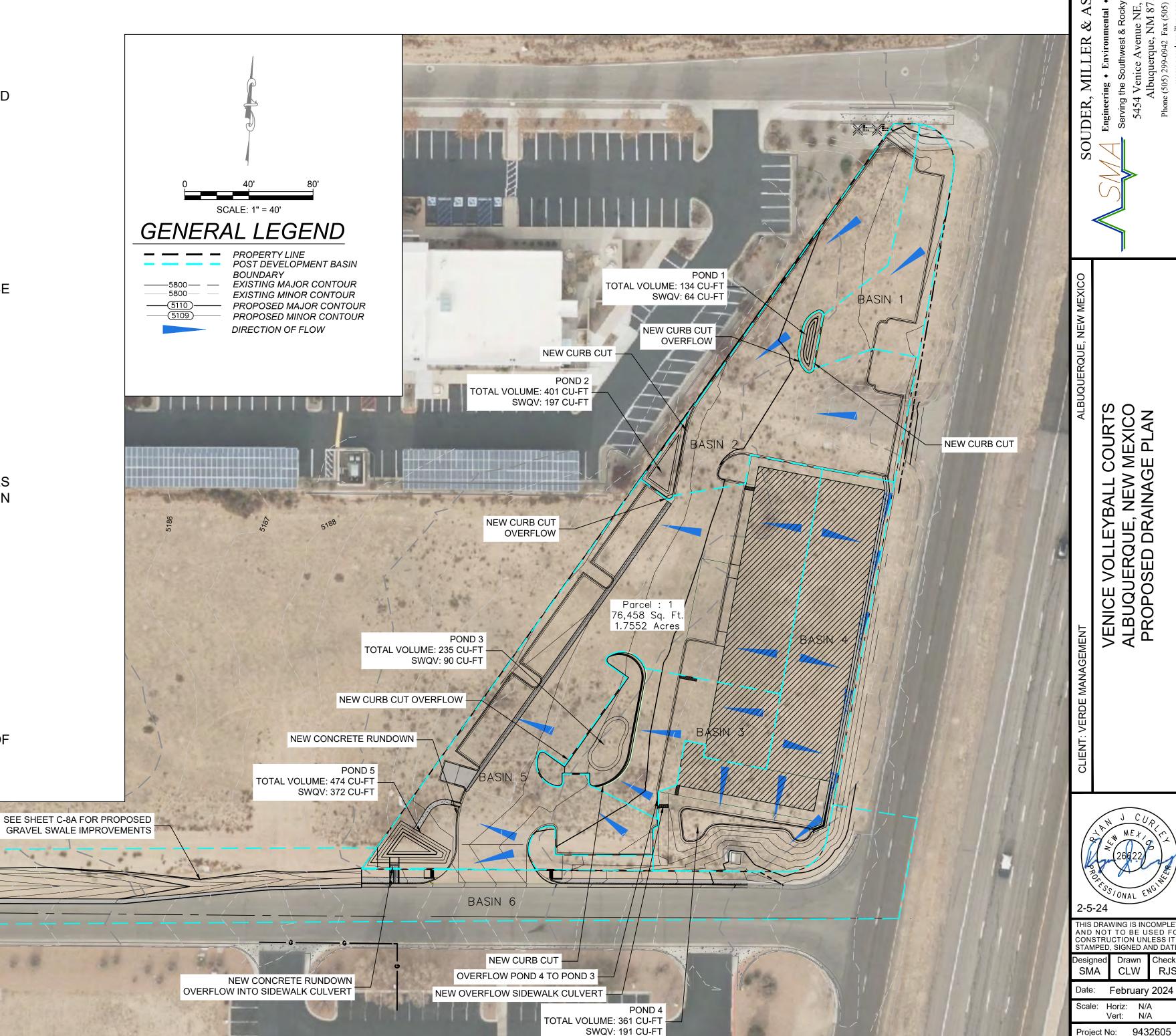
TO CALCULATE THE REQUIRED SWQV, THE IMPERVIOUS AREA IS MULTIPLIED BY 0.42" FOR NEW DEVELOPMENT OR 0.26" FOR REDEVELOPMENT SITES. (0.60 AC \* 43,560 FT / AC ) \* ( 0.42 IN \* 1 FT / 12 IN ) = 914 CU-FT

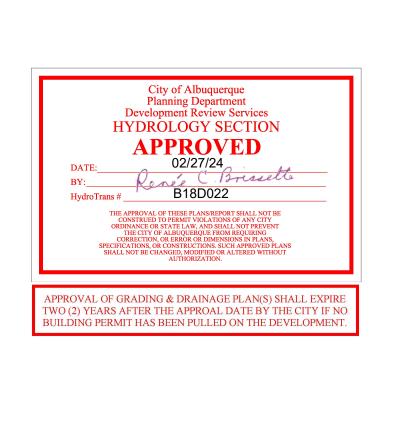
•	LAND TREATMENT
	D (ACRES)
	0.60

Rim: 5181.2' Inv.: 5174.0'

.: 5176.1

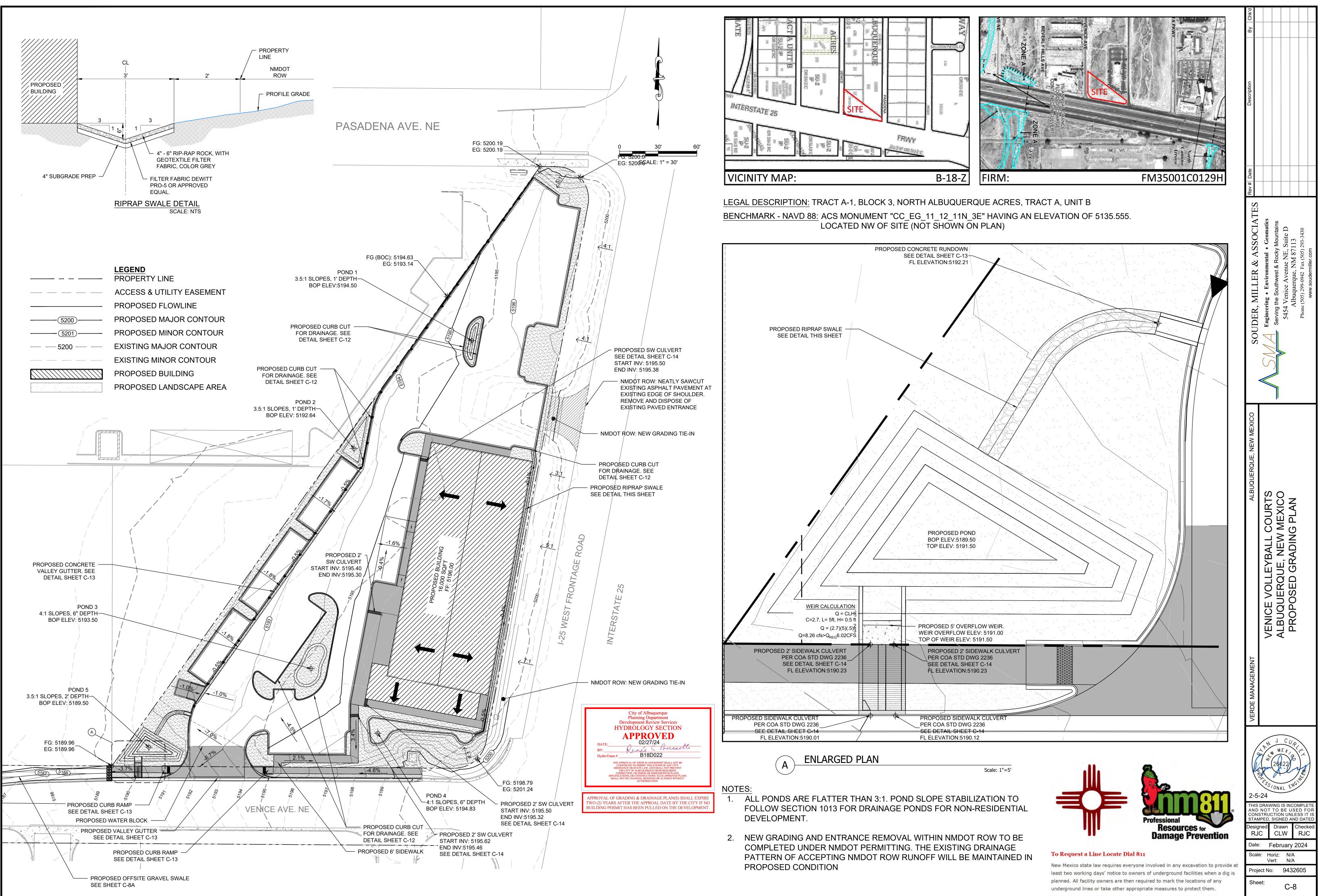
HYDROLOGIC RESULTS SUMMARY									
BASIN	AREA	100-YR, 24-HR	100-YR,	CALCULATED	PROVIDED				
		DISCHARGE	24-HR	SWQV	SWQV				
	ACRES	CFS	CU-FT	CU-FT	CU-FT				
SITE HISTORIC (1-5)	1.72	3.22	6,867	N/A	N/A				
OFFSITE HISTORIC (6)	0.57	1.05	2,234	N/A	N/A				
TOTAL	2.29	4.27	9,102						
ONSITE DEVELOPED BASIN 1	0.12	0.43	842	64	134				
ONSITE DEVELOPED BASIN 2	0.37	1.30	2,566	197	401				
ONSITE DEVELOPED BASIN 3	0.17	0.60	1,188	90	235				
ONSITE DEVELOPED BASIN 4	0.36	1.25	2,475	191	361				
ONSITE DEVELOPED BASIN 5	0.70	2.45	4,850	372	474				
OFFSITE DEVELOPED BASIN 6	0.57	2.25	5 <i>,</i> 031						
ONSITE TOTAL	1.72	6.02	11,921	914	1,605				
OFFSITE TOTAL	0.57	2.25	5,031	-	-				
TOTAL	2.29	8.27	16,952	914	1,605				





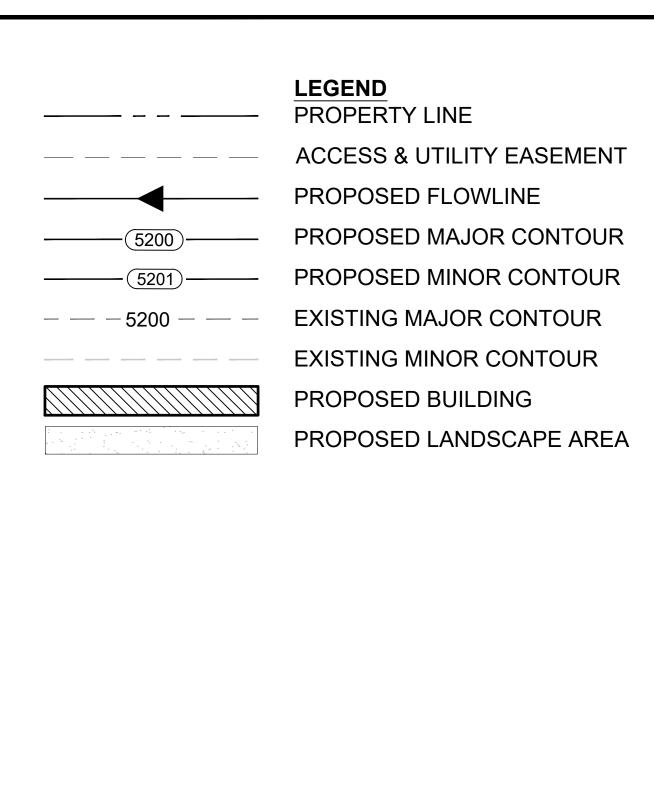
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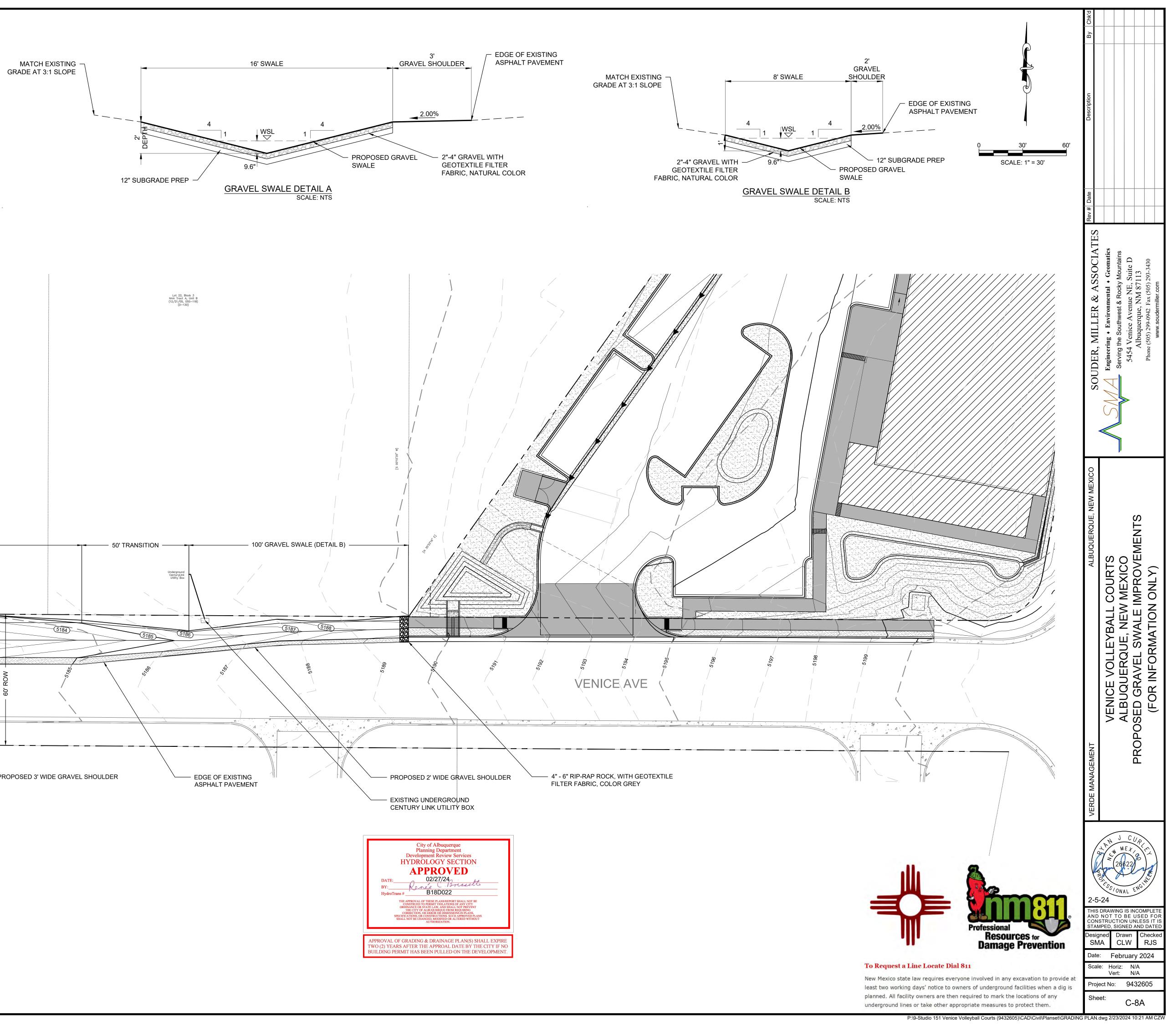
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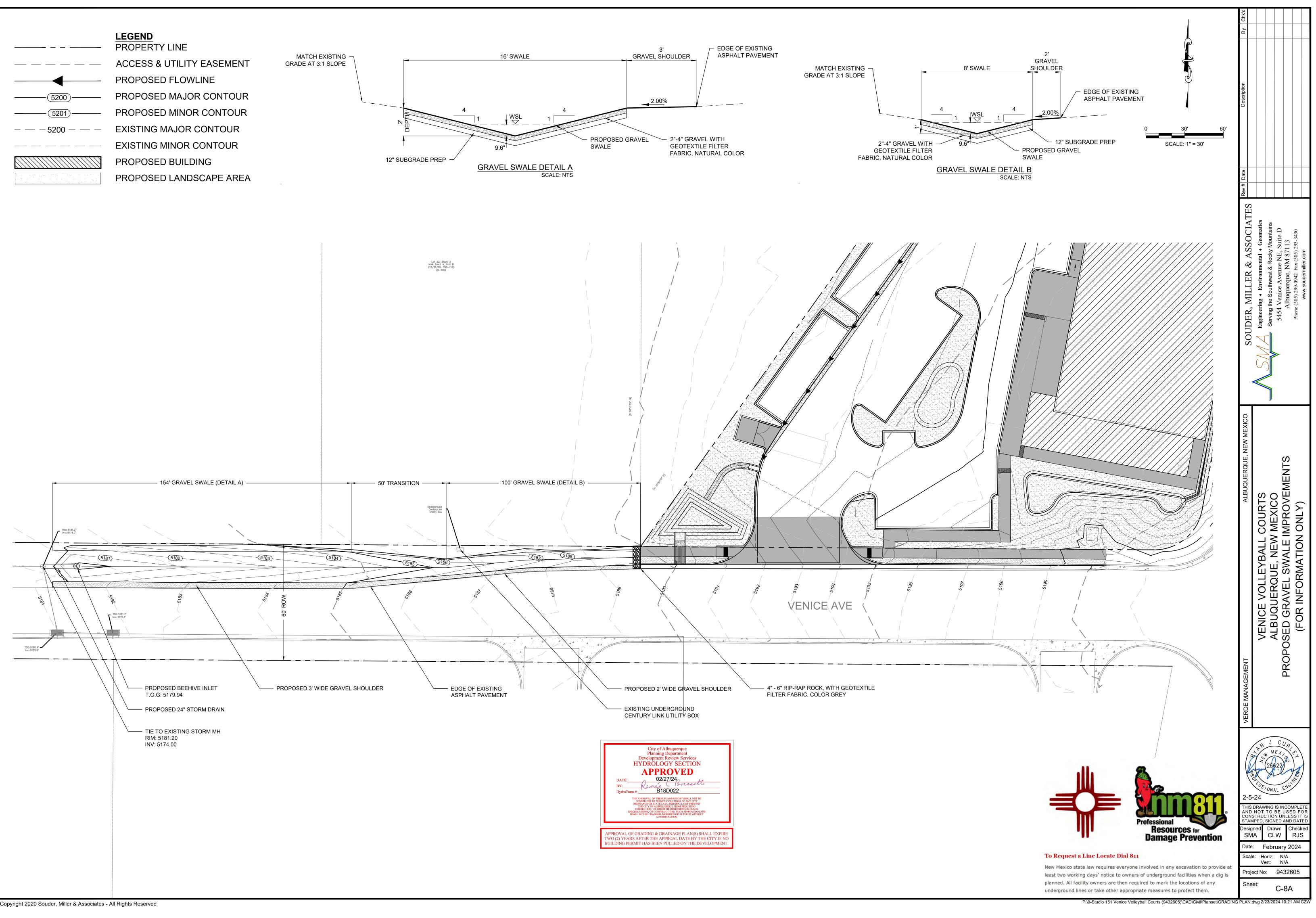


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